

Motorways



SERVICES WE USE 10

MOTORWAYS

How did men go from one part of the country to another in olden days?

At first, there were only rough tracks or paths through the forests and marshes. Nobody "made" them. They grew through use, like sheep-tracks on a hillside.

Many paths ran along the tops of the hills. It was safer up there from wild animals and other enemies.

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Some of these old tracks along the tops of hills can still be seen. There are the Ridgeway in Berkshire, Icknield Way over the Chiltern Hills, and the Pilgrim's Way in Kent.



When the Romans came, they built good, straight roads. These were paved with stone, and drained. Horses could pull carts along them.



When the Romans left, many of their roads were allowed to break up. Others were still used, but the Roman paving was covered over with stones and earth.

As the years passed, other roads were built. Many men used to earn their living by breaking stones to put on the roads. The new roads wound about the countryside, turning sharp corners to go round fields instead of across them. They were very rough. In winter, deep ruts and pools of muddy water made them hard for travellers to use.



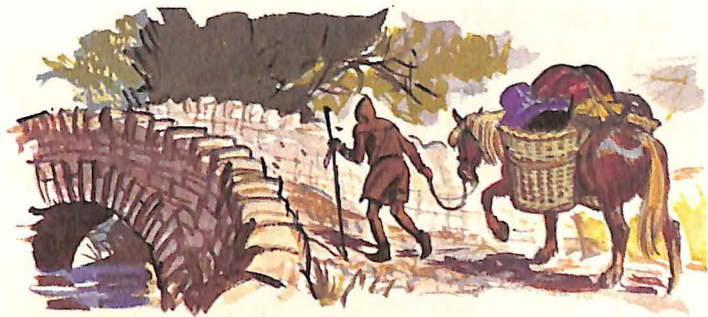


In the 18th and 19th centuries, many new roads were built and old roads were made better. These roads were used by stage-coaches which ran between all the big towns.

The roads were still rough, and travelling by stage-coach was not very comfortable.

At this time, some goods were carried by pack-horses. The horses carried bundles on their backs.

There were many narrow roads used mainly by the pack-horses. Rivers were crossed by narrow pack-horse bridges.



Some of these bridges can still be seen.

In the 18th century, General Wade built roads in Scotland so that his soldiers could travel more easily and more quickly. A little later, Telford and Macadam invented much better roads.

Telford's roads were built like this.



Macadam's roads were like this.



The main roads were called
“turnpikes”. Every few miles there
was a gate and a toll-house.
Travellers had to pay a “toll”
before they could pass through.



Then, with the 20th century, came the motor-cars. At first there were hundreds—then thousands—then millions! There were also lorries and buses, vans and coaches.

The narrow, winding roads could not take all the traffic. They became more and more choked with vehicles. Men tried to make the roads better by building roundabouts, by painting white lines and by putting up traffic lights. But this was not enough.

Finally it was decided that special roads for motors would have to be built.

First came the “autobahns” in Germany and the “freeways” in America; then the “motorways” in Britain. Motorways cost a great deal of money. In 1965 they cost £750,000 a mile to build.

Architects design the motorway and the bridges. Draughtsmen draw thousands of plans. Surveyors decide the best way for the road to go. Engineers plan its building.

All the land has to be bought from hundreds of owners. The cost must be worked out. Road-builders have to be chosen to do the work.

The road-builder is called the “contractor”. Thousands of men work for him. They use many machines.

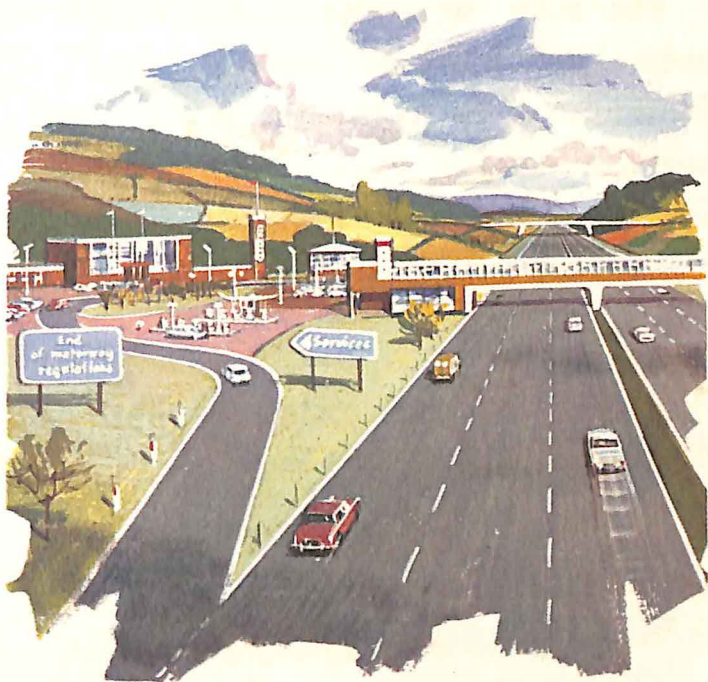
Bull-dozers and mechanical shovels move thousands of tons of earth and stone. They make cuttings through hills and embankments over low ground. Forests have to be cut down and bridges built.



The men use concrete-mixers and special machines for building the foundations and putting on the road surface. A hard verge or "shoulder" is made along both sides of the road.

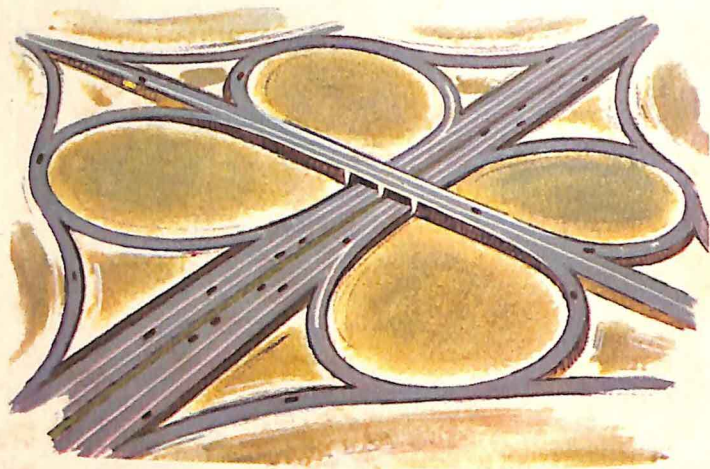
Cafés and petrol-stations have to be built. The big blue signs have to be made and put up, and telephones placed every mile.

There is nothing on the motorway to hold up the traffic—no towns, no crossroads, no roundabouts, no traffic lights, no sharp bends. All other roads and railways cross the motorway by bridges, either under



it or over it. The lanes are marked by white lines and “cat’s eyes”.

You must not stop on the motorway. If you break down, you must go on to the “hard shoulder” at the side.



This picture shows a “clover-leaf” junction. Compare it with the pictures on pages 2 and 3!

THINGS TO DO

1. Write down the meaning of: toll-gate, hard shoulder, flyover, slow lane, fast lane.
2. Look at the picture on page 17. Starting at the bottom, trace with your finger the way you would go if you wanted (a) to turn left, (b) to turn right.
3. Draw a picture of a six-lane motorway with traffic going in both directions.
4. Draw a map of Britain showing the motorways.

THINGS TO FIND OUT

1. Find out how long it takes a bus to go from London to Birmingham by way of the M1.
2. Find out how long it takes a bus to go from London to Birmingham by one of the older roads. How much time is saved by using the motorway?
3. Find out what kinds of road-users are not allowed on motorways. Write them down.

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ILLUSTRATED BY W. G. MORDEN

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